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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,225	10/30/2003	Mary Elizabeth Davis	9396	9781

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CINCINNATI, OH 45224

EXAMINER
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CHAPMAN, GINGER T

ART UNIT	PAPER NUMBER
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3761

MAIL DATE	DELIVERY MODE
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01/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/697,225

Applicant(s)

DAVIS ET AL.

Examiner

Ginger T. Chapman

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Status of the claims**

1. Claims 7-12 are pending in the application.

### **Claim language interpretation**

2. With regard to the terminology "visible highlighting", the examiner notes the instant specification defines the terms on pp. 5-6 as:

The term "visible" refers to the quality of being capable of being seen by the naked eye under conditions of normal room lighting or in natural light during the daytime. Becoming "more visible" or "less visible" means changing in visibility to a noticeable extent when viewed under a generally constant or equal lighting condition.

The term "visible highlighting" refers to the visible differentiation of an object such that it noticeably stands out from its surroundings, *e.g.*, by differing in coloration, hue, or tint, by differing in lightness, darkness, or contrast, by differing due to the presence or absence of graphical or solid color forms, or by any other variation serving to create noticeable visible differentiation.

Therefore the terminology "visible highlighting" is being considered as having a noticeable visible difference.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Igaue et al (GB 2,244,201 A) in view of Inoue et al (US 6,320,096).

3. With regard to claim 7, claim 7 is directed to a wetness sensation member integrated with a topsheet and visibly highlighted such that its visibility indicates it is present. As seen in Figures 1-5, Igaue et al disclose a disposable absorbent article for wearing about a lower torso of a wearer and having a longitudinal axis, two laterally opposed article side edges extending between a laterally extending first waist end edge in a first waist region and a laterally extending second waist end edge in a second waist region, and a crotch region interposed therebetween (fig. 1), the disposable absorbent article comprising: a backsheet (5); a topsheet (4) joined to the backsheet (5) and having a body-facing surface; an absorbent core (6) disposed intermediate the backsheet and the topsheet; at least one wetness sensation member (12) integrated with the topsheet (4) such that a portion of the topsheet covering a portion of the absorbent core forms a permeable body-facing layer of the wetness sensation member (p. 4, last paragraph), the wetness sensation member (12) also including a flow control layer (12') disposed between the permeable body-facing layer and the absorbent core in a face-to-face arrangement with the permeable body-facing layer and having two laterally opposed flow control layer side edges, at least a portion of each of the two flow control layer side edges being disposed laterally inwardly of the article side edges (figs. 3, 5); and wherein urine deposited by the wearer onto the wetness sensation member (12) can penetrate through the permeable body-facing layer (4) in a z direction away from the wearer to the flow control layer (12') and the flow control layer (12') retards the passage of the urine through the wetness sensation member in the z direction and supports the movement of the

urine an x -y plane such that the wearer's awareness of urination is enhanced (p. 6, paragraph 2; p. 7, ll. 4-6).

4. With regard to the limitation of a visible highlighting, the instant specification, in particular at p. 8, paragraph 1, discloses that the visible highlighting indicating a presence of the wetness sensation member means that the wetness sensation member is visible, i.e., the visible highlighting is not a separate member but is the wetness sensation member itself, and the wetness sensation member is visible when looking at the topsheet, and does not change in appearance when the diaper is wetted. Therefore, the wetness sensation member can be any visible difference between the wetness sensation member and the topsheet, such that one can look at the topsheet and see the wetness sensation member, which does not change in appearance, as per the instant specification definitions of “visible” and “visible highlighting” as defined at pp. 5-6.

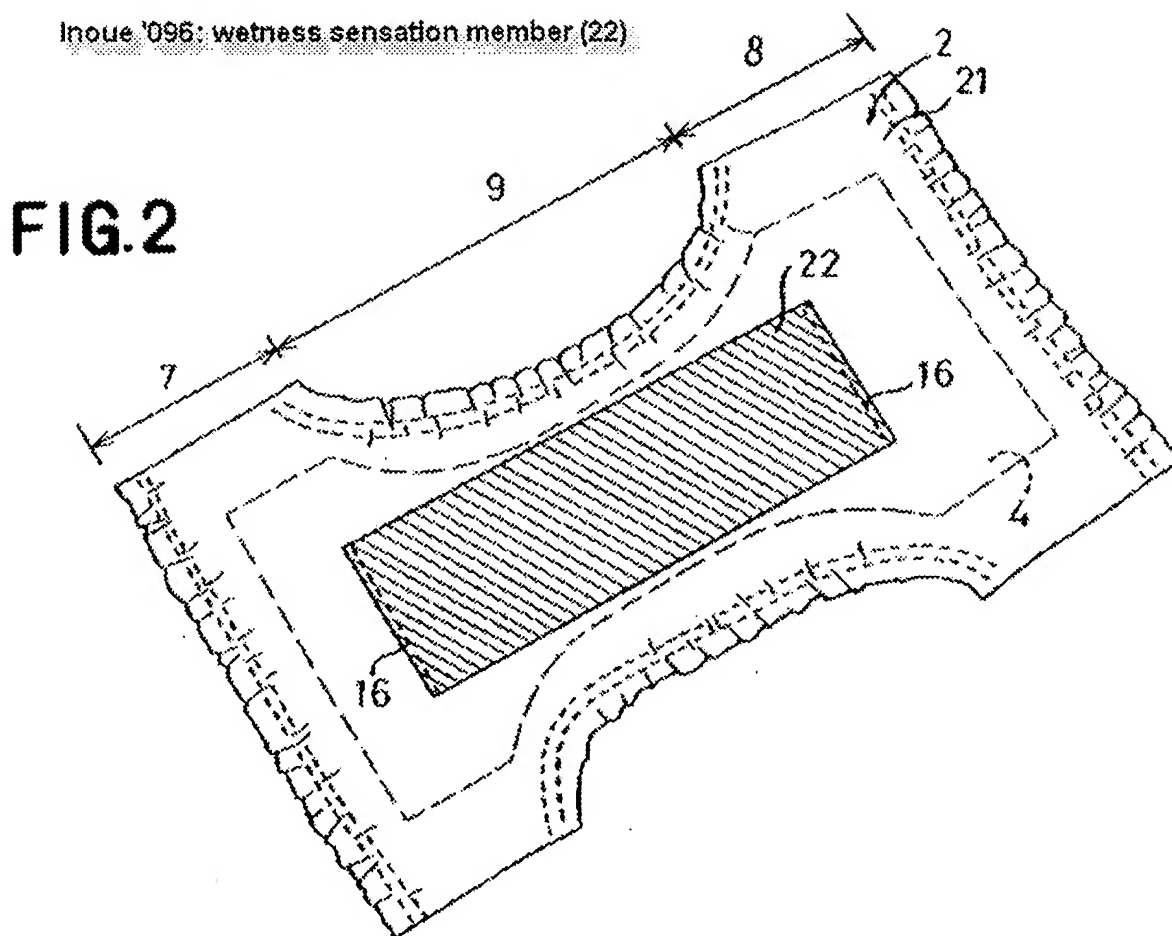
5. Iguae teaches the at least one wetness sensation member (12) (p. 2, paragraph 3) integrated with the topsheet (4) (fig. 2), thus inevitably and necessarily it is visible because the topsheet is visible, but Iguae does not expressly teach that the wetness sensation member (12) is highlighted. Iguae, at p. 2, paragraph 3, expresses the desire for the caretaker to help toilet train the child by means of the wetness sensation member. Inoue, at c. 1, ll. 9-11, teaches the ability of the wetness sensation member to have different characteristics than the topsheet, thus disclosing the desire for such. Inoue, at c. 3, ll. 64-66, teaches that a wetness sensation member is typically part of an element such as the topsheet, which is held in contact against the skin of the wearer to enhance the wearer's awareness that urination has occurred. And the topsheet is in a position in the diaper that it has the greatest likelihood of being wetted by the urine.

6. As seen in Figures 2 and 3, Inoue teaches a toilet training diaper comprising a wetness sensation member (22) integrated with the topsheet (2). As best depicted in Figures 2 and 3, for purposes of illustration Figure 2 is reproduced below, because the wetness sensation member is a smaller piece of material located on top of the flow control layer (21) and further comprises a different material having different properties and characteristics (c. 2, ll. 30-67 to c. 3, ll. 1-10), the examiner has a reasonable basis to conclude that the wetness sensation member (22) would differ in appearance and therefore would be noticeable from its surroundings, *e.g.*, by differing in coloration, hue, or tint, by differing in lightness, darkness, or contrast, by differing due to the presence or absence of solid color forms, or by any other variation serving to create noticeable visible differentiation, and would be substantially unchanged upon wetting. Additionally, Inoue teaches at c. 3, ll. 58-59 that there is a level difference between the layers, *i.e.* the wetness sensation member layer (22) is raised or in relief above the flow control layer (21).

7. Thus the wetness sensation layer of Inoue would appear different in appearance from the remaining portions of the topsheet and thus meets the definition of visible highlighting as set forth by Applicants and therefore fulfills the claim limitations. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the wetness sensation member of Inoue differing in appearance from the other portions of the topsheet, *i.e.* visibly highlighted, as taught by Inoue in order to provide a visibly noticeable wetness sensation member for toilet training since as long as the member is visible when being viewed, its visibility indicates its presence.

8. Finally, as noted in the definition of “visible highlighting” set forth by Applicant, differing in “coloration, hue, or tint, by differing in lightness, darkness, or contrast, by differing

due to the presence or absence of graphical or solid color forms, or by any other variation serving to create noticeable visible differentiation” means that the visible highlighting is not critical but is purely a matter of designer choice, when there is a variety of possible visible highlights it means that the designer can choose any color, pattern, etc. that he wants.



Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iguae in view of Inoue and further in view of Roe et al (US 6,627,786).

9. With respect to claims 8-9, the combination of Iguae and Inoue discloses the article having at least one wetness sensation member but does not disclose a plurality of the members spaced apart from one another by a spacing ranging from about 5 mm to about 15 mm. As seen in Figures 6a and 6b, Roe teaches the members (50a, 50b) spaced apart. With respect to the specific spacing, at column 8, line 53 to column 9, line 6, Roe teaches the following:

Absorbent articles according to the present invention may include a plurality of wetness sensation members disposed on the body-facing surface of the article. **An example of an embodiment providing a plurality of wetness sensation members is shown in FIGS. 6a and 6b.** Two impermeable layers 54a, 54b, are attached to the bottom surface of the topsheet 24 forming **two wetness sensation members 50a, 50b.** For this embodiment, the impermeable layers 54a, 54b are disposed between the topsheet and the absorbent core 28 so that **the topsheet forms the permeable layers 52 of the wetness sensation members.** The two impermeable layers 54a, 54b are disposed parallel to and spaced apart from the longitudinal centerline 42 of the diaper 20. **The spacing is determined to allow enough liquid to pass through to the core so as to prevent flooding that can result in leakage of the absorbent article during urination, while at the same time enable enough liquid to flow and wick towards the impermeable layers forming the wetness sensation members.** The spacing between the impermeable layers can be about 10 mm but can range from about 5 mm to about 15 mm and from about 8 mm and to about 12 mm. For this embodiment, the impermeable layers 54a, 54b are attached to the lower side of the topsheet 24 using adhesives, ultrasonic bonds, radio frequency bonds, or other suitable means. The attachment can comprise bonds covering the entire interface between the impermeable layers and the topsheet, spot bonds or bonds along the longitudinal and transverse edges of the impermeable layers. Although the embodiment described in FIGS. 6a and 6b show only two wetness sensation members, other absorbent article embodiments having **three or more wetness sensation members are contemplated.**

Thus Roe teaches the claimed spacing.

10. In the alternative, Roe teaches optimizing spacing to allow enough liquid to pass through to the core so as to prevent flooding that can result in leakage of the absorbent article during



urination, while at the same time enable enough liquid to flow and wick towards the impermeable layers forming the wetness sensation members, making these result effective parameters. Optimization of ranges of parameters within prior art ranges or through routine experimentation is not sufficient to patentably distinguish the invention over the prior art. MPEP § 2144.05. One of ordinary skill in the art would have recognized that the benefits of optimizing fluid flow through the permeable portions of the topsheet while at the same time allowing fluid to wick toward the impermeable wetness sensation members for operability. Thus these parameters are result effective and as such it would have been obvious to optimize them.

11. With respect to claims 10-12, the combination of Iguae and Inoue discloses the article having wetness sensation members but does not expressly disclose the topsheet comprising Z-folds. As seen in Figures 7a and 7b, Roe et al teach the topsheet (24) comprising Z-folds. Roe, at column 9, lines 55-60, teaches the following:

In order to prevent the portion of the topsheet between the Z-folds from being forced into the gluteal groove and from interfering with the barrier leg cuffs, the **spacing between the Z-folds can be about 65 mm and can range from about 50 mm to about 90 mm.**

Thus Roe teaches (90a, 90b) spaced apart by a spacing ranging from about 50 mm to about 90 mm as claimed, and comprising elastic members (92a, 92b) disposed along the two flow control layers of each of the wetness sensation members disposed within a respective one of the Z-folds (fig. 7b).

12. In the alternative, Roe et al teach that the Z-folded configuration and the elastic elements maintain the wetness sensation member against the wearer's skin thereby enhancing the wearer's awareness that urination has occurred even when the diaper sags around the wearer. Therefore,

it would therefore have been obvious to one having ordinary skill in the art at the time the invention was made to form the topsheet of Iguae and Inoue comprising Z-folds as taught by Roe in order to provide wetness sensation members held in contact with the wearer's skin thereby enhancing the wearer's awareness that urination has occurred.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 7-12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, and 7-11 of U.S. Patent No. 6,627,786.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the issued patent claims every limitation in the instant claimed invention except for the

wetness sensation member is highlighted. It is known in the diaper art to highlight features of a diaper for visibility if desired.

Claim 7 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 6-8 of copending Application No. 10/815,918. Although the conflicting claims are not identical, they are not patentably distinct from each other because all features of the instant invention are disclosed in the '918 claim.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 7 and 8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3-5 of copending Application No. 10/281,791. Although the conflicting claims are not identical, they are not patentably distinct from each other because all features of the instant invention are disclosed in the '918 claim.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

12. Applicant's arguments with respect to claims 7-12 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginger T. Chapman whose telephone number is (571) 272-4934. The examiner can normally be reached on Monday through Friday 9:30 a.m. to 6:00 p.m..

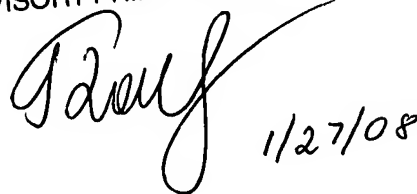
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ginger Chapman  
Examiner, Art Unit 3761  
08/21/08



TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER



1/27/08